TSE2002

Links by Jean Luc Dighaye

Subject: EurAstro TSE Report From: Jean-Luc L. J. DIGHAYE To: solareclipsewebpages@btopenworld.com Date: Tue, 17 Dec 2002 18:03:38

Our illustrated report "Solar Eclipse Mission to Australia - December 2002" is now available online, please consult the corresponding section of http://www.eurastro.de

EurAstro TSE Report

From: Jean-Luc L. J. DIGHAYE To: SOLARECLIPSES@AULA.COM Date: Wed, 18 Dec 2002 05:02:46

Our illustrated report "Solar Eclipse Mission to Australia - December 2002" is now available online, please consult the corresponding section of http://www.eurastro.de

The 'two trains eclipse

From: analog6@ozemail.com.au To: SOLARECLIPSES@AULA.COM Date: Tue, 17 Dec 2002 22:12:10

I keep seeing a reference to this eclipse. As my other keen interest is historic railways (and ordinary railways too) does anyone have, per chance, a photo of an eclipse with trains in it?

And can someone tell me why this is called the two trains eclipse? Regards

Astronomy.com Newsletter 12/19/02

From: Astronomy Newsletter To: solareclipsewebpages@btopenworld.com Astronomy.com December 19, 2002 http://www.astronomy.com

Our first photo this week comes from Stephen Voss of New Zealand. Stephen captured the December 4th solar eclipse from Ceduna, South Australia. The image featured here is a composite of 4 and it shows tremendous detail in the sun's corona or outer atmosphere. You can also see several prominences along the sun's limb. His techniques for capturing this gorgeous view are outlined in the photo's caption. http://list.astronomy.com/UM/T.ASP?A2.2.118.14.126016

Look how close 2030 is to 2002

From: Sheridan Williams To: SOLARECLIPSES@AULA.COM Date: Tue, 17 Dec 2002 17:43:34

I thought people would be interested to see just how close the TSE on 25 Nov 2030 goes to the last eclipse.

From: Crocker, Tony (FSA)

I did a double-take the first time I put up 2030 on Emapwin, thinking I had chosen 2002 by mistake. 2030 is much better for us eclipse chasers. The Australians get much longer totality with higher sun angle for less cloud out risk. The African morning path goes through the Kalahari Desert of Namibia and Botswana with much better weather prospects than this year's path. Ascending vs. descending node makes African paths farther apart than Australian paths.

From: Fraser Farrell

Rest assured that lots of South Australians are aware of this fact - it's something I mentioned frequently during my tours and speaking engagements this year!

The centreline in 2030 comes ashore near Sceale Bay (pronounced "ss-KAY-ail"), which in recent years is little more than a beach with a boat ramp, some good fishing spots, and some holiday houses. Nice place to relax for a long weekend or school holidays. Totality will be a bit over 2 minutes. Remind me to build a 5000-room hotel there in about 20 years ;-)

Other SA places inside totality on 2030 Nov 25 include:

- Haslam, Streaky Bay, Yanerbie Beach, Baird Bay, Port Kenny & Venus Bay (all on the coast).

- Wirrula, Calca, Murphys Haystacks, Talia, Chandada, Poochera, Minnipa, Pygery, Wudinna, Kyancutta & Mt Ive.

- The entire Flinders Ranges National Park, Beltana, Parachilna, Angorichina, Blinman, Wilpena, Hawker, Nepabunna, Chambers Gorge, Balcanoona, and the entire lakebed of Lake Frome.

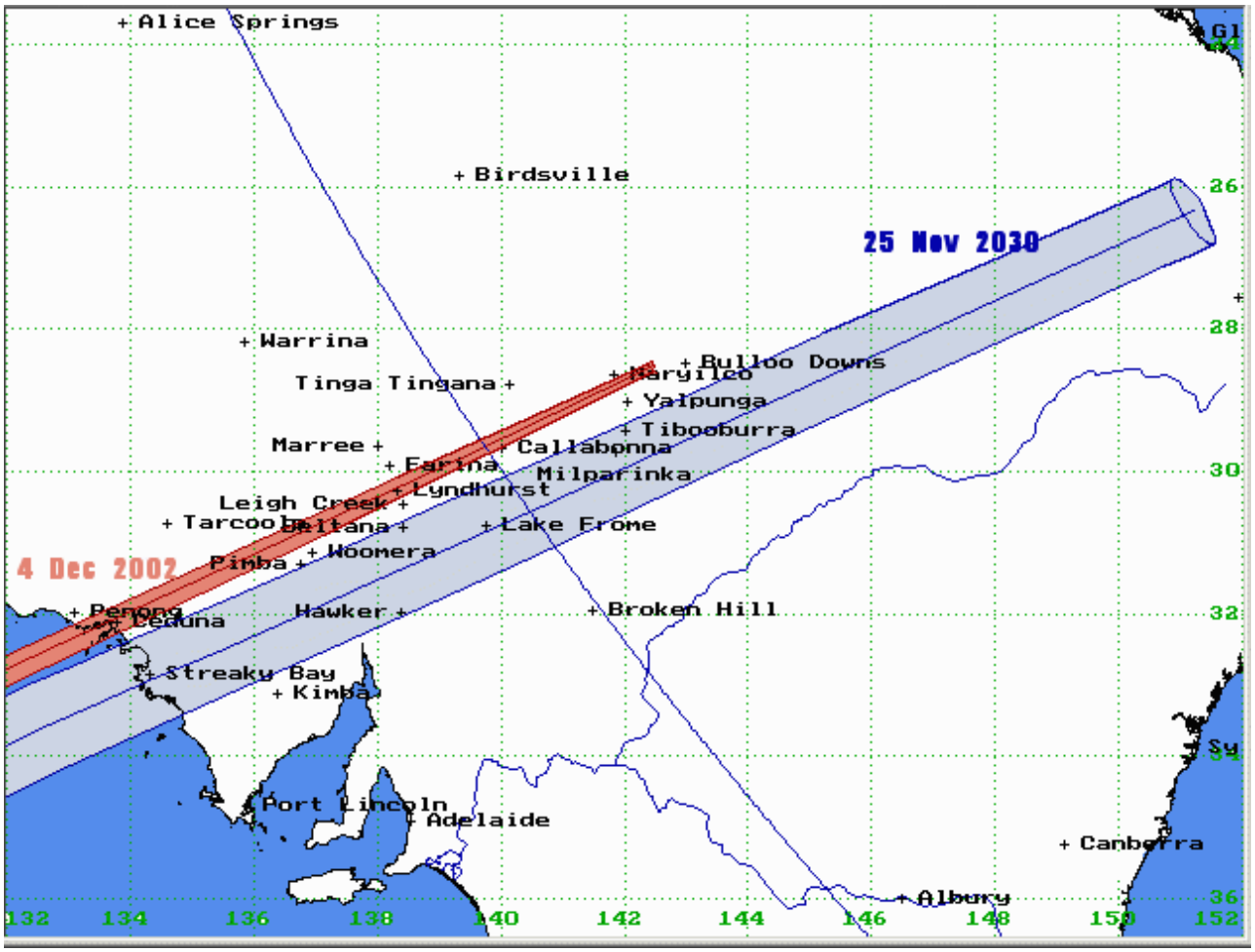
- Arkaroola is on the northern limit, Cradock is on the southern limit; and a slight change to delta-T could put these places either in or out of totality.

Many of you would have recently travelled along the long sections of bitumen road that will also be inside totality. Centreline crosses them near Poochera (Eyre Highway), near Murphys Haystacks (Flinders Highway), near Bookaloo Siding (Stuart Highway), and near Brachina Creek (Hawker-Leigh Creek road). The dirt road from Yunta to Balcanoona is crossed near Lake Frome.

Places close to totality in SA include Smoky Bay, Koongawa, Kimba, Iron Knob, Port Augusta, Pimba, Woomera, Leigh Creek & Quorn.

The 2030 eclipse is part of Saros 133, which also includes the Australian eclipses of 1922 Sep 22, 1976 Oct 23 and 2012 Nov 13. The 1922 eclipse was used to confirm the gravitational lensing of stellar images by the Sun (first seen at the 1919 TSE). The 1976 eclipse was my first TSE. The 2012 eclipse is the next Australian TSE.

BTW Eudora 5.2 has an option to send Plain Text to specified recipients, such as mailing lists.... cheers, Fraser Farrell



TSE2002

Sunset eclipse in Queensland

From: ccmlt To: SOLARECLIPSES@AULA.COM Date: Tue, 17 Dec 2002 18:54:13

Dear friends, Juste come back from Australia. I don't know exactly why, but my alternative travel email adress (on Hotmail) was sadly on the kill list, so all my attempts to send news from Australia failed ... As my friend Philippe said early here, our small team choose to bet on the sunset eclipse at Old Narilco. Our scouting expedition the day before "Eday" was successful enough, so we tried to be at the right place at the right moment. The GPS gave N 28 44 07 and E 141 48 43 for our location, I think about 120 km NE from Glenn's team - but I have to confess that I don't know precisely where they were located. Our map gave the name "Three mile Tank" for the small dam we found about 3 km from Old Narylico, wich was once - maybe - , a nice place, but was now totaly deserted and desesperatly dry - no shop to buy some coke here ; only 4 dead, totaly dry and mummified cows in the dam ...

The sky was cristal clear and the sun could be observed about 1 deg above the horizon at totality, just on the top of some far trees. We were standing just on the side of a small hill, facing the sunset, and there was not hill in that direction ; so the horizon was almost perfect. Some of the Baily's beads where showing a dramatic green hue at second contact, exactly like a green flash, lasting less than a fraction of second. That was a dream but I didn't really expected to see that here. I saw them through my camera (an Olympus OM1) mounted on an ETX 90, giving about 1250 mm focal lengh. My friends didn't notice this effect neither through their own camera, nor with the naked eyes, but still, I think I recorded some of them on the video. Images are still needed to be processed. The unique feature of this eclipse was the shadow cone of the moon, coming from the left of the eclipsed Sun, as we where located a few km north of the centrality line. The cone was about 5 deg thick on the horizon, and something like 20 or 25 deg thick at about 60 deg high, like a fan or huge column going to the zenith. My friends said that this cone was still visible near zenith, but I had not enough time to look at this. The Sun was very oblate and Mercury was visible on the right of the Sun. The corona and some protuberances were easily visible, the corona extending for about 5 or 6 arcminutes from the Sun with the naked eye, showing great details and vivid feathers (plumes?) but the long exposure photos are showing the corona to about one diameter from the Sun ! Not too bad at 1 deg above the horizon ... I haven't yet determined the exact lasting of this totality from our location, but I guess this was the most (ok ; say almost ;-) exciting 20 sec in my life ! Alas, there was too much to observe and to do in so short time ; I promise myself to observe this phenomenon with my own eyes, not spending the time to take picture and to verify some technical details ... and most of my pictures are over exposed, due to the unexpected clear sky. I processed a very first image of the totality taken from the video (camcorder Sony TRV15 + lens X2), composit image from 16 rough images. You can see it here : www.astrosurf.com/carnet-astronome Click on the "eclipse downunder" logo. More to come soon, especially, some terrific images of the shadow cone. Sincerely, Christophe Marlot

From: Evan Zucker

Great report! I'm really looking forward to seeing your images. Unfortunately, that link does not appear to be valid -- I get a non-existent page error when I click on it. Evan H. Zucker San Diego, California

From: Glenn Schneider

Christophe. Wonderful report! I cannot wait to see your images! Please repost the correct URL. I know exactly where you were, 53.686 nautical miles (99.43 km) to our NE (azimuth bearing 63.90 deg from our site). You are much braver than us, the horizon-hugging scrub vegitation scared us back further west. Congradulations! My TRUE sunset eclipse is still on my to-do list - but I suspect my next try at it will be over water. Cheers, Glenn Schneider

From: ccmlt

Dear friends, Yes, you're right. I was a little bit tired ; damned jet lag ... (10 hours). This is now 3 am in France and I can't sleep ; so I have a few minutes to answer.

The correct link is : http://www.astrosurf.com/carnets-astronome

Glenn : >My TRUE sunset eclipse is still on my to-do list - but I suspect my next try at it will be over water.

(Continued on page 64)

TSE2002

Are you considering the next TSE for that ? I so enjoyed this australian sunset eclipse that I'm now asking myself about going to central Asia rather than Lybia for the 2006 TSE. The first weather prospectives for this area that I found today were good enough. On the other side, weather prospective for Brasil at the same period (dawn eclipse) are much catastrophic with continuous tropical rain in the month. Christophe Marlot

From: Evan Zucker

At 06:33 PM 12/17/2002, Christophe wrote: The correct link is : http://www.astrosurf.com/carnets-astronome

Great photo! It's the first one I've seen that clearly shows a reddish/orangish tint to the corona, which is what I would have expected from a sunset eclipse. Merci!

I've been a little surprised and disappointed not to have seen any photos from this eclipse of totality right on the horizon. The only photo I've ever seen like that was taken at sunrise in Brazil a few years ago:
http://www.evanzucker.com/eclipse/Total%20solar%20eclipse%20at%20sunrise.jpeg

I get the impression that nobody was far enough east in Australia to actually see the totally eclipsed sun on the horizon.

For our English-speaking members, I took the text on your web page and ran it through Google's translation engine. Here's the result, which isn't half-bad:

Grains of Baily relative of green right before the second contact; Mercury appears on the line a little with the top of the eclipsed Sun while an immense cone of shadow materializes, immense arch of blackness in the southern sky... With a degree with the top of the theoretical horizon, the Sun is crushed by the refraction and appears right with the top of the cîme of some remote trees. The sky is so pure that the protuberances and the solar crown are largely let observe and photograph... against any waiting. The eclipse is there.

Thank you in Brigitte, Christelle, Marc and Philippe, who made possible this forwarding, and which decorated it of their joy and their good mood.-- EVAN

From: Sheridan Williams

Have you any idea which eclipse the following link was for. If it was at Sunrise, it was probably 1992 from Uruguay surely.

I've been a little surprised and disappointed not to have seen any photos from this eclipse of totality right on the horizon. The only photo I've ever seen like that was taken at sunrise in Brazil a few years ago:
http://www.evanzucker.com/eclipse/Total%20solar%20eclipse%20at%20sunrise.jpeg Sheridan Williams

From: Evan Zucker

At 06:24 AM 12/18/2002, you wrote: >Have you any idea which eclipse the following link was for. If it was at >Sunrise, it was probably 1992 from Uruguay surely.

I thought I had read it was at sunrise, but Michael Gill says that it was taken at sunset on 11 July 1991. I can't find this image on the Web any more.

I bet somebody will recognize it. -- EVAN

From: Glenn Schneider

Sheridan Williams wrote: Have you any idea which eclipse the following link was for. If it was at Sunrise, it was probably 1992 from Uruguay surely.

(Continued on page 65)

The photo in question http://www.cdepa.pt/sol.jpg, which Evan has rehosted on his site, (and which is what really got me thinking some time ago about a TSE at sunset) was from Clive Jackson of the 1991 eclipse taken in Brazil. Here is an email he had sent me about it last summer. I think I may have posted this to SEML before (as I was so enamored with that photograph), so forgive me if this is redundant: To: gschneider@stsci.edu

Hi Glenn, Thanks for your e-mail regarding my total Eclipse photo. This was taken from the middle of Brazil at sunset on the July 11 1991 eclipse. The scope used was a 70mm f5.6 vixen refractor with a pentax Slr and Ektachrome 200 slide film.

I worked out the end of the path of totality with a simple DOS program and managed to navigate to the right spot at the right time. This was not easy to do, we had to travel 1000 kms inland from Salvador, Brazil. This took 3 days in a 20 year old chevrolet I bought for $500 to get us there. We had plenty of adventures on that trip, but it was worth it. Best wishes, Clive Jackson

From: Crocker, Tony (FSA)

I recall seeing that photo before, with its source saying that it was the sunset of July 1991 TSE in the Amazon.

TSE2002

Totality A (fwd)

From: F.Podmore To: solareclipsewebpages@btopenworld.com Cc: "Physics.Department" <physics@science.uz.ac.zw> Date: Thu, 19 Dec 2002 10:23:51

Patrick - Here is the first of 6 TSE images obtained in Zimbabwe by Mike Begbie, which you may like to consider for the special issue of SENL If you want more details about his site and equipment used etc, please email him directly at songbird@mweb.co.zw Francis

>Date: Sun, 8 Dec 2002 18:30:52 +0200 From: Mike and Lorna Begbie <songbird@mweb.co.zw> To: David Kelly <david.kelly@accucard.com>, Sheila Nursten <sheila@s2s.ltd.uk>,

Subject: Totality A

Hi All These images are already third generation...ie. printed from slide, and then scanned on a flatbed at 600 DPI.. (coming as six separate mails!). Wait 'till you see the 4600DPI digital scans directly from slide!

Information: 1969 Nikon F camera body with 400mm Tamron Lens with 2x teleconverter operating at effective focal ratio f/16. Fuji Sensia 100 film. Exposures ranging from 1/1000 to 1/60 second Regards Mike M. J. R.Begbie songbird@mweb.co.zw Hilton Observatory Harare, Zimbabwe 17° 46' 19" S 31° 00' 06" E Astronomy Educator I.C.Q. Obs. Code BEG01

TSE2002

Pictures on this page and the page before by Bigbie (Zimbabwe)

New totality image from Shingwedzi Camp

From: farr To: SOLARECLIPSES@AULA.COM Date: Thu, 19 Dec 2002 00:43:57

Hi, I got to scan my slide with a professional scaner and the results are better. I toke it during the 3 seconds of totality between clouds.

http://www.terra.es/personal8/cazaeclipses/ets2002.html

Best Regards Francisco A. Rodriguez Ramirez www.astroeduca.com www.saros.org

From: KCStarguy@aol.com

Francisco Beautiful pictures and accounts. At least you were able to see and photograph the prominences and inner corona. Your pictures of the partial stages and the people and scenery etc are also very nice. Congrats. I will place a link to it from my 2002 of other peoples' accounts Dr.Eric Flescher

Solar eclipse photography used in advertising

From: Klipsi To: SOLARECLIPSES@AULA.COM Date: Fri, 20 Dec 2002 21:56:48

in the inflight magazine in december Qantas national flights (I flew Adelaide to Sydney) I saw a great ad. It was for the new Landrover Discovery SUV. It showed , double full page, the desktop of a computer. The screen image was a photo of the new Discovery.

On the top of the page was the typical links for a webrowser. The arrow/cursor was stuck on "favourites" and the scrolldown menu of those favourite links was open, so you could see what sites were in the favourites . It read things like, or in the spirit of : "104 Himalaya peaks in 2 months", "eat what you find", "survive Amazone", "name that mushroom and eat it", "what is this bird?", Paris-Dakar", "Mongolia roundtrip", "K2 is OK", "Aboriginal laws", "live and let die" , "below daylight", "scout secrets", "what star is this?" , "solar power 4U" , "snakes.com" , "Antarctica webcams", "surf Iguassu falls", "skydive.info" , "Kilimanjaro at night", etc. etc.

And one of the links was named "solar eclipse photography" !

On the lower right side of the desktop were two files, named "itinerary.doc" and "resignation.eml"

pretty cute ad, and I was enlightened to see the link to the "solar eclipse photography". Cool ! Klipsi

TSE2002

TSE of 4 December 2002 - Marco Polo

From: Gerard M Foley To: SOLARECLIPSES@AULA.COM Date: Sun, 22 Dec 2002 02:31:41

I am interested in hearing by e-mail from anyone who observed the recent eclipse from the ship Marco Polo. Gerry gfoley@columbus.rr.com

From: Michael Gill

Gerry, A friend of mine, Bill Jackson of Simcoe, Ontario was on board the 'Marco Polo' for his 13th TSE (his third on the 'Marco Polo').

He sent me a lengthy report of his journey. Here is the relevant section concerning totality (forwarded with permission):

'Our course was to be very close to the continent on Eclipse day. Not the kind of flexibility I would have liked. The Eclipse was at 8:30 AM and to last 94 seconds. But when we got to our planned location it was cloudy so the ship steamed East. Not soon enough, as there was a clear sky just ahead of us but we never reached it. One advantage was that we didn't need to use the dark glasses during the initial phases. Fortunately the clouds were thin enough that we could see Baily's beads, the diamond ring, and the inner corona, Just the outer corona was missing and we couldn't see any planets. At first I rated it as a 5, but after the show & tell session in the afternoon I raised that to a 6.'

Eclipse from the Stuart highway - report

From: Chris Malicki To: SOLARECLIPSES@AULA.COM Date: Sun, 22 Dec 2002 03:22:18

On Dec.5, I wrote a brief report to the SE list of my observation of the Dec. 4 eclipse. I was rushed for time on a poor internet connection from Coober Pedy, South Australia at that time. I have finally returned to Canada and can now write in a bit more detail.Five years ago, my wife's cousin and her family from New South Wales, Au. visited us and I promised them that we would come see them in Dec. 2002 for the solar eclipse. This would be my wife Liz's and my 9th total solar eclispe. Well, we kept our word. With the help of Fred's eclipse circular, and with the excellent writeup of the path from Fraser Farrell's website, I determined far in advance that the best place to observe would be the Stuart highway near the railway siding of Wirraminna. Three days before the eclipse, we set out in a van from the Blue Mountains near Sydney through the length of New South Wales, Mildura in Victoria State, and via Adelaide, to Port Augusta. Just south of Port Augusta, on the side of the road was a large sign advertising "eclipse information". It was a cute stand where volunteers were handing out a 14-page booklet produced by the S. Australia Tourism Commission entitled: "Eclipse in the Outback". It was nicely printed with a full page photo of a TSE (? the 2001 eclipse).The booklet stated: "A total eclipse of the sun is arguably nature's most spectacular and awe-inspiring phenomenon ... it provides a rare and spectacular experience for those lucky enough to be in the path of totality." and then: "directly viewing the solar eclipse may cause painless but serious eye damage ... there is no safe way of directly looking at any eclipse of the sun ... people should not look directly at any eclipse of the sun." It goes on to say that television and projection can be used. Most unfortunately there was no statement about observing totality directly. After spending the night of Dec. 3-4 in Port Augusta we drove with no problems to Woomera to pick up eclipse souvenirs such as eclipse hats, tee-shirts, and souvenir stamp covers entitled "Eclipse in the outback, Woomera SA" The cover had a nice picture of an annular eclipse on it. The visitor centre in Woomera was inundated with eclipse tourists and had difficulty coping with the crowd. After waiting in line for half an hour, I was finally able to purchase the items mentioned. We did not wish to be dependent on the buses in the Woomera Prohibited Area, so we drove to the railway siding at Wirraminna, with the aid of Fraser's topographic maps and descriptions of the Stuart highway. We ended up driving about 2 km. north of the railway siding. Although there were a number of other vans, cars, tents, the area is so large that our nearest neighbour was at least one kilometer, or 2 trees away from us. With great difficulty, due to the howling wind, we set up a tarp, Canadian and Australian flags, and our tents. I estimate our position to be 31deg. 9.75min. south, and 136deg 05.5min east; i.e.2.5 km. away from the centreline and midway between the highway and the train tracks. It was a fabulous clear blue sky, windy and cool with no flies. We instructed our Australian relatives on the proper observation techniques, observed the partial phases with a filtered ETX scope. I find that most people, esp. first timers do not witness the 1st diamond ring because they do not look at the sun (or are afraid to) until it is totally eclipsed, and only see the 2nd diamond. However, as in most eclipses, I have become used to glancing naked eye, unfiltered about 15 sec. before totality and was again rewarded by seeing the corona first appear out of the brilliant crescent sun and I saw the beautiful 1st diamond ring at the 1 o'clock position. 29 seconds is a very brief time to observe totality. The corona had four or five major streamers, fairly symetrical and about one solar diameter (1/2 degree) long. Polar brushes were prominent.Prominences at 1 o'clock and 7 o'clock were nice but

TSE2002

not as large as in some of the other eclipses I've seen. The chromosphere was dramatic due to the apparent close fit of the moon with the sun. The third-contact diamond ring appeared. A few seconds later, Liz and I turned around and saw the thinnest lunar shadow we've ever seen (only 34 km wide). Liz remarked that it had very well defined edges. We are used to seeing a huge black wall of a shadow not such a thin finger which very rapidly (in seconds) disappeared towards the north west. Finally, we watched and photographed the setting crescent sun. At night I observed the most brilluant zodiac light I've ever seen, and looked for nebulae and clusters in the Large Magellanic Cloud. Finally, a we drove back to the Blue Mountains, 2000 km away seeing hundreds of emus and kangaroos, and a koala close up on a tree trunk near Siding Spring Observatory. As Fraser Farrell aptly stated in a newspaper, the brief moment of totality is like the finger of God briefly touching the world of men. I totally agree (pun intended). Chris Malicki

From: Sheridan Williams

I enjoyed Chris Malicki's report from the Stuart Highway, but one thing was missing which always makes the best reading: What did his relatives think of the experience? Best wishes Sheridan Williams * sheridan@clock-tower.com

From: Chris Malicki

Sheridan Williams and Eric Flescher ask whether I have pictures and movies and how did my wife's relatives enjoy the eclipse. As to pictures, yes I did get some but I am mainly a visual observer not photographer. I will post pictures to my website soon (am overwhelmed with things to do now as I just returned from Aust. a few days ago) and inform the list. As to relatives, Amy, the niece who turned 11 years old on Dec. 4, (her actual birthhour being during the partial phase), when asked at school how she liked the eclipse, could only answer that she loved seeing the baby kangaroos (joeys) and koala bear that we saw on our way back. Her mother, Liz's cousin thought the eclipse was OK but she was generally tired of waiting all day in the howling wind and dust and probably didn't apprecaite it as much as she could have. Her 50 year old husband, loved the eclipse and was especially thrilled by the second diamond ring. He was too overwhelmed by the shortness of it all to notice any coronal features, and he did not notice the thin shadow rushing away right after totality like we eclipse veterans did. I think that experience enables us to notice these things. He is however very enthusiastically plannig a trip to Cairns with us in 2012 and wants to see more eclipses. He'll probably visit us in 2017.
Chris Malicki

2002 Eclipse images and videos

From: Dale Ireland To: Solar Eclipse List <SOLARECLIPSES@AULA.COM> Date: Mon, 23 Dec 2002 02:21:12

Hello I have just started my web page for this eclipse. It includes a time-lapse wide angle AVI video which shows the movement of the shadow in the atmosphere, a large real time video, and some photos. I will be adding more as I scan them. Please have a look at http://www.drdale.com/eclipses/australia2002/index.htm Dale Ireland

PS my wide angle shot is on the front page of Spaceweather.com today... just blowing my own horn again :)

From: KCStarguy@aol.com

Dale Great shot of the shadow. Beautiful. But spaceweather said your wife took it! Who did it? what type of camera, asa and exposure settings? How dark did it get? I am missing a plug in for the avi as did the quicktime did not show up but I will try to figure it out. congrats I am collecting 2004 accounts to place on a page so if you have accounts pics and more , please privately off line.

From: Dale Ireland

Hello and thanks Yes my wife Suzanne took the photo. She was just pointing and shooting an Olympus 2020 digital camera set on auto, go figure. I did a little contrast enhancement in Photoshop but not much. Dale

From: Robert B Slobins

Eric: My wife read your message and had a few comments that would be inappropriate to repeat on this forum.

It turns out that simple eclipse photography is very easy. My first shots in 1970 were surprisingly good. Now to do professional level work is another story.

In my view, one thing the eclipse chaser needs to have is a wife who likes to travel if not appreciative of astronomy. As I mentioned before, I make my wife the site boss, and she just jumps at the opportunity to be the boss (at anything). ---

In the meantime, let's give Suzanne some credit for her work. I am sure that she is quite thrilled at being featured on space-weather.com and there is no need to take that away from her.

Dale: I am curious: How much astronomy does Suzanne know? cheers/rbs

Shadow bands/wind speed

From: Eduard Masana To: "INTERNET:SOLARECLIPSES@AULA.COM" <SOLARECLIPSES@AULA.COM> Date: Fri, 20 Dec 2002 16:41:39

Dear All: I have some photoelectric measurements of the shadow bands from the Stuart Highway, very near of the central line. As you know, this atmospheric phenomenon is closely connected with the meteorological conditions, specially with the wind speed. Unfortunately, I have not accurate records of the wind speed/direction at the moments just before and after totality. Did anybody register these magnitudes? Has anybody a register of the temperature during the eclipse? Thank you, Eduard Masana Barcelona (Spain) emasana@am.ub.es

From: KCStarguy@aol.com

I caught the shadow bands ever so faintly on video in 2001. Will you post the video for us to see somewhere? Please identify you equipment, camera/camcorder and exposure settings etc. thanks Dr.Eric Flescher

From: Barrie W. Jones

To read about the theory of shadowbands, see
J L Codona, Astronomy and Astrophysics, volume 164, pages 415-427 (1986) (technical)
also (non-technical) J L Codona, Sky & Telescope, May 1991, pages 482-487

My own photoelectric measurements plus analyses are reported in
B W Jones and C A L Jones, Journal of Atmospheric & Terrestrial Physics, volume 56, pages 1535-1543 (1994) (the 1991 eclipse)
B W Jones, Journal of Atmospheric & Terrestrial Physics, volume 58, pages 1309-1316 (1996) (the 1994 eclipse)
B W Jones, Journal of Atmospheric & Solar-Terrestrial Physics, volume 61, pages 964-974 (1999) (the 1998 eclipse) These are technical articles.

I and a colleague recorded shadow bands in Botswana 4 December this year. We used a video camera (no photoelectric data this time), and they are visible on the tape. They were only just visible to the eye so we were a bit unlucky. I hope to show the tape during Totality Day at the Open University (UK) in February, and further details will be presented then (I also intend to distribute the details on this list).

It will take some time to analyse the images (pressure of other work). Barrie W Jones

From: Eduard Masana

In 2001 I took some pictures of the shadow bands projected in a white screen using a SRL camera with a 50mm lens (F1.4). The exposure was 1/1000 sec. and I used a 3200 ISO film. The shadow bands were very faint, and the pictures only show them after a hard image processing.

This year in Australia I used fotodetectors to record the variability of the light dued to the shadow bands. But, again, the shadow bands were extremely faint. Eduard Masana Barcelona (Spain) emasana@am.ub.es

TSE2002

Special TSE2002 Edition SENL - contributions

From: solareclipsewebpages@btopenworld.com To: SOLARECLIPSES@AULA.COM Date: Tue, 24 Dec 2002 11:53:51

Dear All, Just a reminder that the contributions for the Special edition of the SENL (TSE2002) should be send to us. Pictures, reports or links to webpages are welcome. Do not be missed out in this SENL edition.

The Solar Eclipse Newsletter will be available by the end of the week. Best regards, Joanne and Patrick

From Carter Roberts

From: Carter Roberts To: solareclipsewebpages@btopenworld.com Date: Tue, 24 Dec 2002 15:51:08

This is a view of the shadow from on centerline north of Lyndhurst, South Australia. This was my 15th success of 16 trips to total solar eclipses. Carter Roberts Attached: body shadow1small.jpg

Eclipse 2002 page

From: Dale Ireland To: solareclipsewebpages@btopenworld.com Date: Tue, 24 Dec 2002 16:41:21

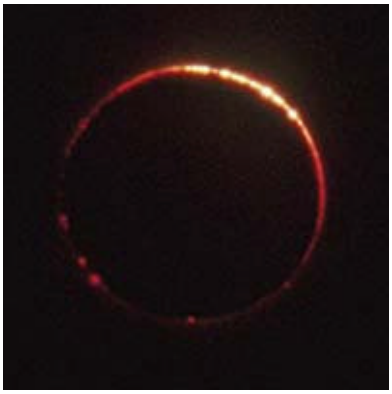
Hello, Suzanne and I have started our page about our observation of the eclipse from the Australian outback. The address is

http://www.drdale.com/eclipses/australia2002/ I have yet to include a full written report on the page, but will in the near future. Dale Ireland

Our group from Silverdale, WA. USA Suzanne Ireland, Linda Mueller, Dale Ireland, Kay and Art Lee, Greg Mueller

Australian Outback 29deg 36min 22sec South 139deg 47min 41sec East

TSE2002



Beads (picture by Dale Ireland)

Cloudcover at totality in Singelele Camp, Musina (picure by PP)

Quick report from Folorodwe, South Africa

From: Chris O'Byrne To: SOLARECLIPSES@AULA.COM Date: Tue, 24 Dec

A group of 24 Irish were in Folorodwe at an eclipse event organised by ASSA and African Itch. Folorodwe (or "the field of scorpions", as it became known) is within 1km (northeast) of the centre line, beside the road between Tshipise and Pafuri Gate.

Eclipse morning saw broken cloud, which soon turned into an impenetrable mass of cloud. There was much debate about abandoning our position and heading in the direction of Messina, hoping that we would outrun the clouds (which were heading in that direction), but we decided to stay put. We only got maybe 4 or 5 glimpses of the partial phases through small holes in the clouds. However, good fortune was with us, and we managed to will a hole in the clouds over to the sun's position just before 2nd contact. It arrived at the sun's position just as the diamond ring was showing, and stayed there until about 5 or 10 seconds into totality.

The next we saw of the sun was about 15 seconds or so after totality through another small hole.

Such was the excitement and the tension that I cannot give any report as to what the eclipsed sun actually looked like! I can only report that the skin on the back of my neck crawled, and my whoops of delight were carried into the darkness.

We later heard that people at the other end of the field of scorpions saw nothing of totality, such was the small size of the hole.

All in all, a very dark eclipse on the dark continent.

Thus began our African adventure - we would later see 4 of the "Big Five" (all except Buffalo), and, during a bushwalk, 4 of us (and our guide) got charged by a rather upset black Rhino - who got even more upset when he had to retreat under a hail of bullets (well, OK, one bullet). :) Chris.

2002 TSE observers in Angola, Namibia and Mozambique

From: Sheridan Williams To: SOLARECLIPSES@AULA.COM Date: Mon, 23 Dec 2002 19:27:25

I am trying to log the locations where the 2002 eclipse was observed, however I have seen no reports from Angola, Namibia or Mozambique. If you were at any of these locations, or know someone who was, please send me there name, site lat and long, and whether they were successful or not. Does anyone know the lat and long of the Olympic Star's unsuccessful location? I will create pushpins for Microsoft World Atlas, and email these to anyone who wants them. Best wishes Sheridan Williams * sheridan@clocktower.com

From: Egan Mark

Hi In my attempt to experience the eclipse vicariously, I found that Paul Maley experienced the eclipse from Mozambique (partially successful) see: http://www.eclipsetours.com/Dec4.html It looks like Friedhelm Dorst observed the eclipse from near Paul (see his pics on the same page) and a video at MSNBC (http://www.msnbc.com/news/842627.asp#BODY) shows the eclipse from Angola (if I remember correctly) It didn't look like they were successful....although I wish more video would be shown! Sorry it's not much but I hope it helps Happy Holidays to all! Mark

From: Sheridan Williams

Paul Maley's web page says Friedhelm Dorst had a successful viewing of totality in Navashila. Has anyone any idea where this is? I think it's in Mozambique, but can't find it on my atlases. Best wishes Sheridan Williams

TSE2002

Report from Kezi, Zimbabwe (for SENL and SEML)

From: Peter Tiedt To: Solar Eclipse Mailing List <SOLARECLIPSES@AULA.COM> Date: Tue, 24 Dec 2002 14:52:14

TSE 2002 Report from Kezi, Zimbabwe

The Africlipse / Wild Frontiers group assembled in Johannesburg on the morning of 29 November and departed by mini-coach to Tumelo Lodge in the Tuli Block, where South Africa, Botswana and Zimbabwe meet, at the confulence of the Shashi and Limpopo Rivers. The group was a small one, members coming from Denmark, Holland, the USA and South Africa. All had seen at least one TSE before (either Europe '99 or Zambia '01) and were eagerly looking forward to their 2nd.

Three days were spent in the idyllic surrounds of the Tuli Block, before departing for the FarmHouse, about 50 km South of Bulawayo in Zimbabwe. This would be the base for the eclipse observations, with totality being observed from either Kezi or Mangwe Fort, another 50 km further south, and virtually on the centreline.

These locations were chosen by tour leader Peter Tiedt as being ideal for a clear morning. December mornings in southern Africa can be notoriously fickle, but on the highveld (above 800m) mornings are usually clear, followed by possible thunderstorms in the afternoon. It was decided very early on to avoid any location below 800m, which excuded all of the path in South Africa and Mozambique. Botswana was not considered as the roads were all transverse to the umbral path, and the same applied to the Caprivi Strip in Namibia. Angola was excluded on the grounds of duration and instability.

Only in Zimbabwe was the road infrastructure parallel to the umbral path, making a dash for clear skies possible while remaining in the path of the shadow. The political situation was felt to be stable enough towards visitors and this is in fact exactly what happened. Although there was some minor harrassment from officials, in general they were courteous towards eclipse visitors and their foreign exchange!

On December 3rd a final decision was made to go to a granite outcrop about 9km south of Kezi. The outcrop, which offered 360 deg views was ideally situated, and easily accessible. Totality duration was estimated at 79 seconds for geographic coordinates were 28d 27.911' E ; 20d 59.165 S. Contact times [local time] using Occult were calculated as follows:

1st - 07:09:33
2nd - 08:14:51
3rd - 08:16:10
4th - 09:30:41

The observation point was to be shared with groups from the local guest lodges, who had arranged a champagne breakfast, to be served after totality.

Mornings for the 3 days prior to the eclipse were crystal clear, with cloudless skies persisting all day. Eclipse day continued this trend and there were absolutely no worries about cloud as the time of first contact approached.

As 2nd contact approached, the darkening of the sky in the north-west from the approachinf umbra was clearly apparent, and Venus and Jupiter were visible some minutes before totality. Shadow bands wer not sighted before totality as most observers were too engrossed with events taking place in the sky.

The diamond rings were elongated, and totality not as dark as expected. The Corona was magnificent, with four almost symetrical short streamers out to about 3 solar radii. Prominences were observed at about 1 o'clock (2) and about 6 o' clock. All in all it was agreed that the eclipse was utterly beautiful and far too short.

All too soon, the 79 seconds had rushed by and the closing diamond ring signalled the end of totality. It also signalled the popping of champagne corks as all group members toasted another successful eclipse in the clear African sky.

With the next two total solar eclipses being either extremely difficult, very short, (or both) group members agreed to meet again in 2006, exact location to be decided from a spot in central Libya or north-western Niger for about 4 minutes of totality.

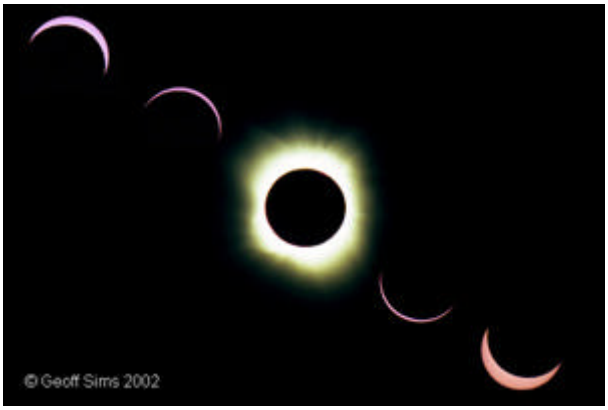
Post eclipse the group visited the ancient ruins at Great Zimbabwe, and while others made their way to Johannesburg and home,

(Continued on page 73)

some visited the Kruger National Park, where hookups and post-eclipse chats were held with Fred Espenak, Jay Anderson, Kelly Beatty (S&T) and Bob Yen as well as others who had observed from KNP. All KNP observers had mixed results with cloud playing a significant part. Peter Tiedt 24 Dec 2002

2002 Eclipse images and videos

Picture by Geoff Sims



From: Geoff To: SOLARECLIPSES@AULA.COM Date: Mon, 23 Dec 2002 22:39:59

Hey,

>It turns out that simple eclipse photography is very easy. My first shots in 1970 were surprisingly good. Now to do professional level work is another story.

This is definately true. A girl from our group took a point-and-shoot camera, and used it WITH A FLASH (despite me telling her not to) during totality, and the result was suprisingly good. The exposure for the totally eclipsed sun was very nice, clearly showing the dark moon as well as the corona.

BTW, photos from our group should be available early janurary - things have been hectic over here ever since I have gotten back and I haven't had much time to get all the images prepared. I have had some fun doing some compositing of totality images in photoshop, the results are suprisingly good... --Geoff

From: Dale Ireland

Hello I suppose anyone can get lucky but kidding aside Suzanne has taken photos at 3 total eclipses and is quite familiar with what is going on, what to expect and look for, and how to compose the images. We both decided to go with wide angle photos for this eclipse because the low altitude of the Sun gave the opportunity to include the terrain while still having a decent sized solar image on film. I chose to use a Nikon 180 f/2.8ED which gives a 7.6 degree vertical since our original viewing location was to have the Sun 4 degrees above the horizon. We ended up much further along the track due to the crazy conditions around Lyndhurst and the Sun was barely 2 degrees high so I could have used my 500, oh well. This why the close up images on my page are grainy, they are all taken with only a 180. I think that getting a photo which shows the terrain as it appeared to the eye during totality, including an image of the eclipsed Sun that has some detail rather than just being a blown-out doughnut is as great or greater a challenge than layering close-up images to get inner and outer corona. In Suzanne's photo we slightly darkened the sky in Photoshop while masking the terrain to match the naked eye appearance but the sun is still blown out I have seen so many full disk totality images over the years that I was hoping to get something different and I am still working to blend my short and long exposure 180 "wide angle" images together to maintain the terrain lighting and get some prominences too and it is very very hard. Dale

From: Robert B Slobins

Dale: I am going to be Photoshop-literate. As you may know, I have experience in chemical darkrooms, color and B+W. For solar coronae, I create a series of masks out of corrugated cardboard, make test sections for exposure, balance the color, and go. It takes me 4 minutes to do a properly burned-in image.

I am optimistic about scanners like the Nikon 4000. The more D-max, the better to dig out the information in the negative's densest parts.

I will experiment with layering. When I dodge or burn-in in chemical darkrooms, I tend to eyeball the image and say that this part needs 20% more/less exposure and burn or dodge accordingly. I have to figure this out in Photoshop. The plethora of books do not address this subject well.

You may want to try this out. If you use 3 layers, then each layer would be 33% opaque. I will do likewise and see what happens.

TSE2002

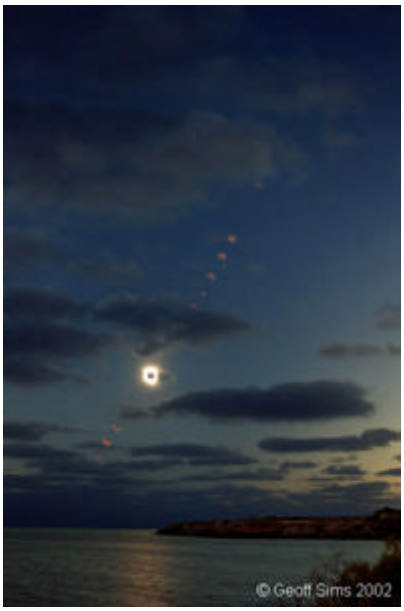
I just do not like the compositing work. I do not want to fiddle with equipment during totality, especially during short duration eclipses.

I am sure that Suzanne is quite competent by now, as Elisabeth is with the logistics. Problem is that Elisabeth thinks that every bright point object in the sky is Venus. 8 June 2004 will be an interesting day....

Yet, last May, she did identify the planets correctly after a few days' work. Then she starts seeing them in the daylight. Then she sees Comet Ikeya-Zhang at mag 5.0+ naked eye...and she is 47 years old. Go figure. Merry Christmas cheers/rbs

Picture by Geoff Sims

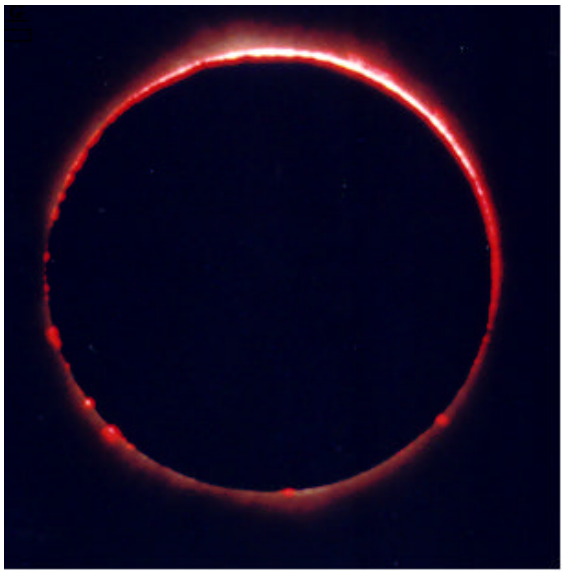
From: Geoff To: solareclipsewebpages@btopenworld.com Date: Tue, 24 Dec 2002 23:05:33



Patrick, Here are some recent (currently not publicly available) photos I took from the recent eclipse, taken from Ceduna, South Australia. …/… Anyway, I thought I should send these to you for the "special" SENL. …/... If you like you can also link my SE website, which will (soon) contain all the images, exposure details, and descriptions. …/… http://home.iprimus.com.au/rsims/seclipse.htm

From: Georg LENZEN To: solareclipsewebpages@btopenworld.com Date: Wed, 25 Dec 2002

Dear Joanne and Patrick, please, find attached 3 photos from the trip to Australia. I went there together with my son Philippe (now just 10 years) to observe totality near Wirraminna on the Stuart Highway. The third photo was taken with a 170mm zoom Minolta "just like that" by Philippe without me noticing it. I was busy to photograph through my 4" Meade Schmidt-Cassegrain f/10 telescope (photo 1 and 2). Best regards, Georg Lenzen



TSE2002

Picture by Georg Lenzen

2002 Eclipse Report from the Woomera Rocket Site

From: Andrew J White To: SOLARECLIPSES@AULA.COM Date: Thu, 26 Dec 2002 20:43:17

Dear all, I have uploaded an illustrated report of our eclipse experience:

1. Eclipse day - A narrative of 4 December 2002
2. Scientific Observations: Results of Temperature and humidity measurements
3. Total Solar Eclipse Images
4. Media Reports

I hope to add to it over the coming weeks. You can view it at:

http://www.vanda.demon.co.uk/travel/Australia/Aussie2002.htm

Best wishes Val and Andrew White andrew.white@vanda.demon.co.uk

Bob Yen's Report from Messina area

From: Peter Tiedt To: Solar Eclipse Mailing List <SOLARECLIPSES@AULA.COM> Date: Thu, 26 Dec 2002 20:01:46

Here is Bob Yen's Report, more images are coming later:

http://www.comet-track.com/eclipse/secl02/secl02.html

2002 Australia eclipse report & pictures updated

From: Fred Bruenjes To: SOLARECLIPSES@AULA.COM Date: Thu, 26 Dec 2002 02:01:39

Hello all, I've finished my 2002 Australian eclipse web report and would like to invite everyone to visit:

http://www.moonglow.net/eclipse/2002dec04/

Of interest should be my composite image of totality, made up of six images through two digital cameras (one camera for corona, one for prominences). I've also added closeup video (with sound) of totality, an animation of 1st through 3rd contacts, a picture of the Moon's surface via Earthshine during midtotality, and more . Please take a look! Fred Bruenjes

From: KCStarguy@aol.com

Fred Very nice account , pics and movie. I looked at the quicktime movie and liked the incoming diamond ring and outgoing and the sounds of the people etc. However I see you used a digital camera but am wondering why the video is so fuzzy? Maybe it is the size of the window I got or the speed. Your short video sequence on the website has more detail and is nice too. Congrats on the composite. Very nice (why does it take so long - takes time to render?)
I particularly like the two little prominences peaking out at 4 oclock . Great work congrats!!!!

I also liked the partial eclipsed maps of Australia and Africa- did you make these? very clever. Well done indeed. Happy Holidays.

GPS, lightmeter, shadow bands sheet and crescents at Singelele Camp (pictures by PP)

TSE2002

My first TSE report

From: Odille Esmonde-Morgan& Warwick Lawson To: SOLARECLIPSES@AULA.COM Date: Wed, 25 Dec 2002

Well, here is my report, not very scientific but my first TSE was very impressive (yes, Klipsi, much better than an annular) and I am eagerly awaiting my next opportunity for something reasonably local.

(NOTE: all times are local) My plans for this eclipse were for my partner Warwick (not a 'lunatic' like me) and myself to go to Wirraminna on the Trans Continental Railway and observe the eclipse from there. We had planned to leave Sunday night and arrive there about lunchtime on eclipse day after a leisurely and relaxing trip.

Well - you know what they say about best laid plans . . . Due to problems with some payments due to our (very) small business, we did not get away until left from Canberra much later than expected, at 1430 AEST Tuesday to drive the 1600 kms to South Australia. We drove as far as Hay that night (yes, I can vouch that the Hay plains are very FLAT), against high winds and through several dust-storms and a thunderstorm, stopping for just 6 hours of sleep. The lady at the van park in Hay where we stopped said they had missed any rain from the storm, but it had fallen both sides of the town! Up at 0430 and off.

We drove like maniacs all day Wednesday, right on the speed limits all the way, with just brief stops for driver changes accompanied coffee revivers from our thermos and trips to the you-know-where! With time running away faster than water in the drought (although we gained 30 minutes at the state border crossing) , we decided to go to Lyndhurst as it was the closest site to access (about 100 kms les than Wirraminna, and no large towns to traverse.

It was extremely windy the whole way, which made driving at such speed doubly unpleasant, but I was determined not to have got so far and miss out on my first TSE. We reached Orroroo at 1615 and stopped for diesel. The man there asked where we were going, and when I told him, he said we'd never make it by 1940 - my reply was "do you want to bet on that?". We did it! Reached the edge of the path of totality with just 20 minutes to spare. Warwick was driving and I was monitoring progress as we got closer with my little pinhole camera (a "penhole" pinhole punched in a post-it note) on the map.

We knew when we'd reached the path of totality by the huge numbers of cars and campervans at various sites along the side of the road. It was a great relief to get there, knowing we were finally in the path of totality. It was fun to hear Warwick's 'WOW' when he first looked through his eclipse glasses at the partial phase - he later declared the whole exercise worth the trip. I set him up with my Sony Mavica digital camera to take a video (mpg only) of totality and got on with hurriedly setting up my stills camera - Canon T90 with 500 mm f8 mirror lens - on its tripod. As I did not have a solar filter (due to my disorganisation!) I set it up, then with its lens cap on, lined it up approximately by eye using the eclipse glasses. When totality occurred I found I was pretty accurate. Took 6 shots during the eclipse, but have not yet been developed, I am finishing that film today and will put it in at my very good pro lab for developing, photos will be posted on my web page.

After the fun was over we realised we had nowhere to stay, and the side of a busy road with thousands of cars travelling past didn't appeal, so we went back to Copley and threw ourselves on the mercy of the caravan park lady, who very kindly found us a dusty corner to park our van - and best of all use of the shower (I've never been so dusty) and loos. I have to concur with Geoff Sims on his points:

1. Totality felt so short . . . I nearly forgot to take ANY photos, I was so entranced.

2. Despite all the advice eclipse veterans give, I can only now understand everything they say. After the totality was over, it was only then I realised that I had forgotten to look for the chromosphere, prominences, or Mercury, not to mention shadow-bands, which everyone says were very marked this eclipse! It was over much too quickly..

3. I learnt much from this eclipse and will be better prepared next time. But we still experienced the wonder of the eclipsed sun. . .

4. I think that after seeing a 30 second totality, even a 2-3 minute eclipse would seem leisurely! And a 6+ minute eclipse ... *2009* ... would seem extremely long... so long I can't even imagine what it would be like. And I can't wait to see a longer one! AFTER THE EVENT We spend the next few days enjoying the sights of SA's northern/central areas. I would very much have liked to go further North and see Maree and Lake Eyre, and get over to see Wilpena Pound Lake Frome, but as I've only been in my job 6

(Continued on page 77)

TSE2002

months I could only have one week's leave, so we'd decided before setting out we'd just see the things of interest on out journeys to and fro. Next time.

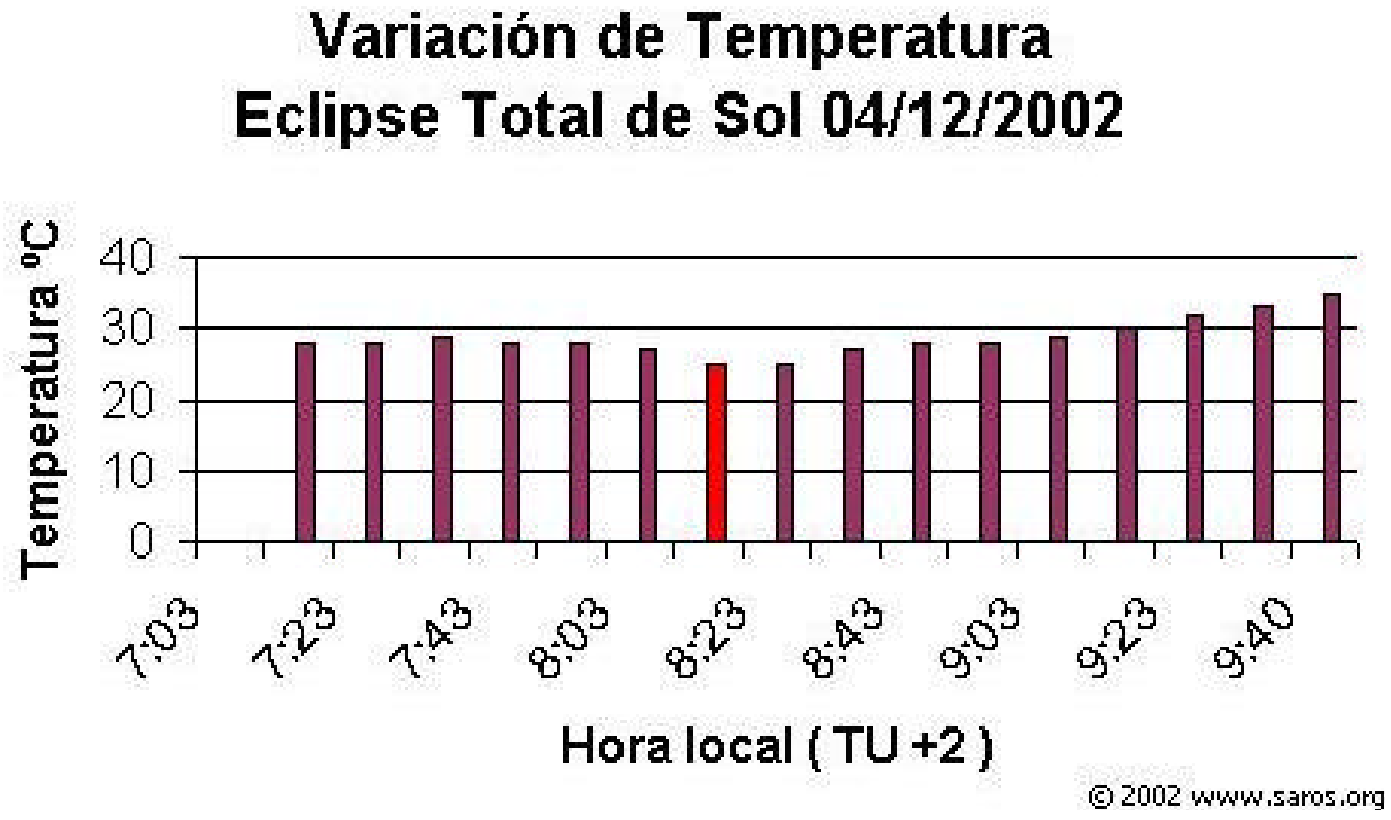
We are also train buffs, and on the way up had realised we were running beside the old Ghan line, and also saw a loaded freight train with 3 x 83 class diesels, and, as we later found out, 161 wagons (it seemed to go on forever) coming back from the Leigh Creek mines at Copley. Our drive back was via Hawker, then on to Quorn, home of the Picci Ricci Historic Railway, for an overnight stop. On arriving there we were dismayed to find they'd run a special train that day for all the eclipsers in town - and we'd missed it! After a tour of the railway and the town, we set off towards Morgan, the next overnight spot chosen. We had a wonderful wander around here, found more bits of railways (they used to service the river boats with 9 trains daily to Adelaide) including the remains of a triangle for turning steam engines. We set off across the Murray on the little car ferry the next day (my first ride on a car ferry) and travelled as far as Hay again for the night, with a stop at Angove's winery cellar door and stocked up on some good ones on the way past. The last day's drive was hot again and we got home at about 1830 Sunday might - just in time for me to go back to work! Odille Esmonde-Morgan Canberra, Australia

From: barr derryl

Odille: A most enjoyable report. Certainly many of us can relate to business delays that distract us at the last minute. I almost missed the 2001 eclipse completely (or should I say totally) because of business complications that chose the moments just before departure to raise their ugly heads. Also, I find your remarks regarding shadow bands most interesting. We sought for them quite intently but unsuccessfully both before and after totality near Farina Station. This is the first eclipse out of the last 4 during which I failed to observe shadow bands. Any other shadow band observations by groups in Australia? Derryl Barr

From: Francisco A. Rodriguez Ramirez

My small contributions are my homepages about eclipses. http://eclipsechaser.astroeduca.com (my personal eclipses observed) and SAROS Group www.saros.org (in spanish .. sorry) And my last eclipse image from Kruger with clouds Best Regards and Happy New Year Francisco A. Rodriguez Ramirez www.astroeduca.com



TSE2002

From Eckart—Kraus

From: Reisebüro in der Südstadt GmbH Date: Thu, 26 Dec 2002 15:22:44

Dear Mr. Poitevin, we have a huge collection of links to reports and pictures on TSE 2002 on our site dedicated to this eclipse (http://www.sonnenfinsternis2002.de/). This webpage is in German. The deep-link to the reports is http://www.sonnenfinsternis2002.de/berichte.htm . Furthermo re we have a chronological link list (with more than 100 links) to media reports (especially African and Australian newspapers) covering this years eclipse (http://www.sonnenfinsternis2002.de/medien.htm). Links to general informations pages (Fred Espenak, Peter Tiedt a.o.) are on http://www.sonnenfinsternis2002.de/links.htm . …/… We wish you you all the best for the remaining hours of christmas and the upcoming year of "cold eclipses"! Katja Eckart & Stefan Krause Reisebüro in der Südstadt GmbH http://www.eclipse-reisen.de/ http://www.sonnenfinsternis2002.de/

Pictures by Joanne and Patrick Poitevin in South Africa

TSE2002

2002 Australia eclipse report & pictures updated

From: Fred Bruenjes To: SOLARECLIPSES@AULA.COM Date: Sat, 28 Dec 2002 00:29:34

KCStarguy@aol.com wrote: am wondering why the video is so fuzzy? Maybe it is the size of the window I got or the speed. << http://www.moonglow.net/eclipse/2002dec04/ >>

Hi Eric, I agree that something funny is going on with the Quicktime version, but I couldn't figure out what. Try setting your connection speed in QT to ISDN or higher, and then take a few steps back away from your computer screen, or squint real hard. :)

> Congrats on the composite. Very nice (why does it take so long - takes time to render?)

The core compositing step takes only a couple of minutes, the rest of the time is fiddling with parameters and tweaking things in Photoshop. I used a different compositing technique than what is typically done because I used a digital camera. Corona images started in 16 bit linear TIFF format, were scaled in brightness proportionally to their exposure time, merged by masking overexposed pixels, then brightness was logarithmically scaled and finally a 1/x radial graduated function was subtracted (sort of like a digital Newkirk filter), all using custom software (500 lines of C code). Color, gamma, and black level was corrected, the radial blur trick was done to enhance coronal detail, and then prominences were layered in using a painted mask, all in Photoshop (because my D60/400mm lens setup was accidentally knocked out of focus just before totality, I had to comp in the prominences from my backup camera to maintain detail.)

> I also liked the partial eclipsed maps of Australia and Africa- did you make these?

Yes, I wrote a program where I supply a base map (in the shape of some country or continent) and the computer calculates the magnitudes and orientations and places the little pictures accordingly. It's only worth doing for easily recognizable continents or countries. Fred Bruenjes

Successful Eclipse from 'Arton Villa' near Messina

From: Katherine Low To: SOLARECLIPSES@AULA.COM Date: Sat, 28 Dec 2002 12:36:31

Hello all, Katherine and I are just back from our 31 day self-drive tour through South Africa (and Swaziland). We observed a beautiful eclipse and were very happy to see the totality perfectly well through a big opening in the clouded sky several minutes before totality. We rushed off after first contact from our initial site at km 21 on the Maralele drift, this is the road running from Messina along the Limpopo river, as we saw more clouds approaching from that direction (eastwards). We drove back westwards towards Messina where the sky looked clearer and finally set up the tripod at the hill top of the Arton Villa. This is a turn off where the tarred road from Messina ends, around km 8, and turns into a gravel road. I hope to have a full report ready in a week or 2 together with some pictures. I still have to send my films for development and hope something good will show on it. Cheers, Kris Delcourte

Shadow bands

From: Fraser Farrell To: SOLARECLIPSES@AULA.COM Date: Sun, 29 Dec 2002 05:51:19

>Also, I find your remarks regarding shadow bands most interesting.

Derryl, Several reports of shadow bands from the African end of the Dec 4 TSE. But none that I know of from the Australian end; despite many observers - including me - specifically looking for them.

I speculate that the strong wind (and low altitude of this TSE in Australia) homogenised the air too well for the shadow band phenomenon to occur. The wind also produced temperatures more typical of a _winter_ day; much to everyone's relief. Lyndhurst had 41 C on the Wednesday after the eclipse. cheers, Fraser Farrell

Joanne Poitevin with Janet Mattei (AAVSO) at Singelele with shadow bands set up - car and sheet (Picture PP)

Joanne & Patrick

The sole Newsletter dedicated to Solar Eclipses

WE'RE ON THE WEB AT
http://www.Mr.Eclipse.com/SENL/SENLinde.htm
and
http://solareclipsewebpages.users.btopenworld.com

THE SOLAR ECLIPSE NEWSLETTER IS A MONTHLY NEWSLETTER ABOUT SOLAR ECLIPSES EDITED BY PATRICK POITEVIN & JOANNE EDMONDS. FINANCIAL SUPPORT FROM THE RAINBOW SYMPHONY.

THE ELECTRONIC VERSION OF THE SOLAR ECLIPSE NEWSLETTER IS AVAILABLE ON THE WEB PAGE OF FRED ESPENAK.

THE SOLAR ECLIPSE NEWSLETTER IS FREE OF CHARGE, BUT IS NOT AVAILABLE IN HARD COPY.

South Africa trip by Joanne and Patrick Poitevin